



COMPANY STANDARDS

AMENDMENT No. 01

TITLE:

CABLE ASSEMBLY

DATE: 2010-11-16

STD No.: CEW03

AMENDMENT SHEET - 1/1

ISSUE No. --

In page 2 of 4, Table-3 'SIZE CODE' shall be read as follows instead of existing :

5. SIZE CODE :

The size code and their specific requirements shall be as per Table-3

TABLE-3 SIZE CODE

Unit : mm²

| CODE | NOMINAL CROSS SECTIONAL AREA | SPECIFIC REQUIREMENTS |
|------|------------------------------|-----------------------|
| 0 | 16 | |
| 1 | 25 | |
| 2 | 35 | |
| 3 | 50 | |
| 4 | 70 | see note |
| 5 | 95 | see note |
| 6 | 120 | |

Note : a) For the size codes 4 and 5 Highly flame retardant (UL94 V0) flexible conduit to Company Standard CEC01 423XX shall be fixed.

b) Method of fixing conduit : Leaving 20 cm at each end and heat shrink tube shall be applied at both ends of conduit.

c) Length code : XX shall be L minus 40 cm (each end 20 cm + 20 cm) and the remainder to be divided by 10 is the length code.
(Length mentioned in drawing may be in mm)

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APPROVED BY:

GE



COMPANY STANDARDS

CEW03

TITLE :

CABLE ASSEMBLY

PAGE NO. 1 OF 4

DATE : 2003-02-01

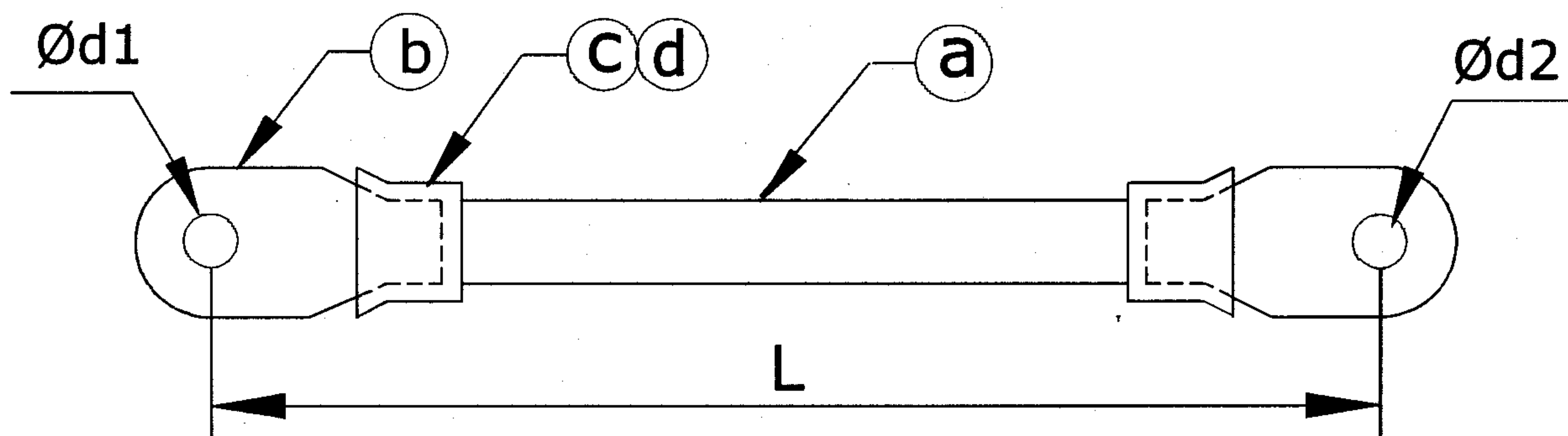


FIGURE-1

TABLE-1 MATERIAL

| | |
|-------------------------|------------------------------------|
| a) CABLE | As per Company Standard C2501. |
| b) TERMINAL | As per Company Standard CET01. |
| c) TAPE (Adhesive) | PVC adhesive tape as per IS: 7809. |
| d) Tape, (Non-adhesive) | PVC tape. |

1. DIMENSIONS :

Dimensions such as diameter $d1$, $d2$ shall be as per Table-5. Length (L) shall be as per requirement.

2. CONSTRUCTION :

The terminals shall be crimped to both the ends of the cable conductor. Non-adhesive tape is to be wound as shown in the Figure-1 at the crimped ends. The non-adhesive tape shall be firmly held by winding adhesive tape around it.

3. DESIGNATION :

Part number & description shall be as shown below. The first 5 digits indicates the Company Standard for the item & next five digits indicates the item codification.

| | | |
|---|----|----|
| A | AA | NN |
|---|----|----|

Cable Ass'y (03)
Electrical cable (EW)
Co. Std. (C)

| | | | |
|---|---|---|----|
| N | N | N | NN |
|---|---|---|----|

(L)–Cable length mm/100
Terminal Code (Table-5)
Colour Code (Table-4)
Size Code (Table-3)

PREPARED BY: CSD/
CFWC "ELECTRICAL"

ISSUE NO:

REPLACEMENT FOR:

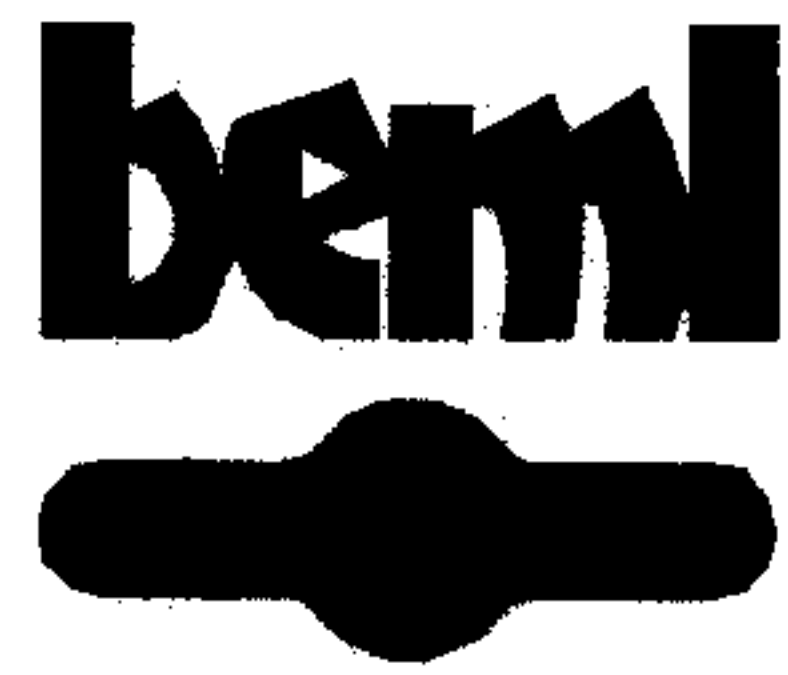
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D(P) 15.4

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| CEW03 | COMPANY STANDARDS |  |
| PAGE NO. 2 OF 4 | TITLE : | |
| DATE : 2003-02-01 | CABLE ASSEMBLY | |

EXAMPLE :

A 70 mm² cable of black colour, having Ø 8 mm size terminal at both ends and length of 3000 mm shall be designated as CEW0342330.

4. TESTS :

All the tests for cable shall be as per Company Standard C2501 and for terminals as per Company Standard CET01.

4.1 ACCEPTANCE TEST :

The following shall constitute acceptance test in addition to acceptance tests indicated in Company Standard C2501 & CET01.

4.1.1 ADDITIONAL TEST :

Proper termination shall be ensured by ' PULL TEST '. The crimped cable shall be tested for the crimp strength as specified in Table-2.

TABLE – 2

Unit : kg

| NOMINAL CROSS SECTIONAL AREA OF CABLE (mm ²) | MINIMUM FORCE REQUIRED TO SEPARATE CONNECTION FROM ITS ASSOCIATED CONDUCTOR |
|--|---|
| 16 | 100 |
| 25 | 100 |
| 35 | 130 |
| 50 | 180 |
| 70 | 300 |
| 95 | 300 |
| 120 | 300 |

5. SIZE CODE :

The size code shall be as per Table-3 below.

TABLE-3 SIZE CODE

Unit : mm²

| CODE | NOMINAL CROSS SECTIONAL AREA |
|------|------------------------------|
| 0 | 16 |
| 1 | 25 |
| 2 | 35 |
| 3 | 50 |
| 4 | 70 |
| 5 | 95 |
| 6 | 120 |

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COMPANY STANDARDS

CEW03

TITLE :

CABLE ASSEMBLY

PAGE NO. 3 OF 4

DATE : 2003-02-01

6. COLOUR CODE :

The colour code shall be as per Table-4 below.

TABLE-4 COLOUR CODE

| CODE | COLOUR |
|------|--------|
| 1 | RED |
| 2 | BLACK |

7. TERMINAL CODE :

The terminal code, dimensions $\varnothing d1$ & $\varnothing d2$ of terminals shall be as per Table-5. The other dimensions shall be as per Co. Standard CET01.

TABLE-5
TERMINAL CODE Unit: mm

| CODE | $\varnothing d1$ | $\varnothing d2$ |
|------|------------------|------------------|
| 0 | 6 | 8 |
| 1 | 6 | 10 |
| 2 | 6 | 12 |
| 3 | 8 | 8 |
| 4 | 8 | 10 |
| 5 | 8 | 12 |
| 6 | 10 | 10 |
| 7 | 10 | 12 |
| 8 | 12 | 12 |

8. SCALE OF SAMPLING :

- 8.1 In a single consignment, all the cable assemblies with the same part number from the same batch of manufacturing shall be grouped together to constitute a 'lot'.
- 8.2 For ascertaining conformity of the Part in a lot to the specified requirements, sampling and inspection shall be done for each lot separately. The number of cable assemblies to be selected from a lot shall be in accordance with Table-6.

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TABLE-6
SCALE OF SAMPLING & ACCEPTANCE CRITERIA

| LOT SIZE (1) | SAMPLE SIZE (2) | ACCEPTANCE NO. (3) |
|-----------------|--------------------|-----------------------|
| Up to 100 | 5 | 0 |
| 101 ~ 150 | 8 | 0 |
| 151 ~ 300 | 13 | 1 |
| 301 ~ 500 | 20 | 1 |
| 501 ~ 1000 | 32 | 2 |
| 1000 & above | 50 | 3 |

NOTE : Figures in Acceptance number are permissible number of defectives.

9. MANUFACTURER'S IDENTIFICATION :

The cable shall carry the following information printed on the cable.

1. Manufacturer's name / Trade mark
2. Indian Standard IS : 2465.
3. Nominal cross sectional area.

10. PACKING AND MARKING :

The cable assembly shall be supplied in coiled condition packed in polyethylene bag.

10.1 The cable assembly shall carry the following information contained in the label attached to the package.

- a) Part number.
- b) Vendor code.
- c) Date, Month, and Year of manufacture.

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